Scaffolding the ERPsim to Augment Student Learning

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Abstract

This study examined the implementation and results of designed conceptual, procedural, and metacognitive scaffolding delivered to an experimental group during the ERPsim Distribution Game. The goal of the scaffolds was to support student inquiry and team performance.

The results of the study revealed that scaffolds designed for the ERPsim Distribution Game had a statistically significant effect on the experimental groups’ simulation results. The teams that received the scaffolding had better overall simulation performance. The experimental groups’ results revealed greater cumulative net incomes, net margin, and return on equity for all three quarters of the simulation. The results have implications for instructors who use the ERPsim games and for those who design and implement scaffolding in technology-enhanced learning environments (TELEs).

The results of this study suggest that the scaffolding substantially increased the performance of the student teams and their understanding of the advanced ERP concepts and processes during the ERPsim. However, the study was based upon team performance. A more effective means of measuring student understanding of learning objectives and domain-specific knowledge should be explored. A planned future study that includes objective measures of individual student learning of ERP concepts will be presented and feedback from the audience will be requested.